

1. A manufacturing method of a thin film magnetic head comprising following steps of:

covering an end portion of said upper magnetic core

removing said non-magnetic protective film from an

wherein a front end of a connection area in which

said end portion is connected to a rear portion of said

head according to claim 1 , wherein said non-magnetic protective film is removed by a polishing process or an

head according to claim 1 , wherein said non-magnetic protective film is removed by using one or more kinds of

gases selected from CF_4 , C_4H_8 , CH_3 , BCl_3 , Cl_2 , SiCl_4 , Ne, Ar, Kr, and Xe.